

**From:** [Roberson, Sharon](#)  
**To:** [Wagner, Christine](#)  
**Cc:** [Non-responsive based on revised scope](#); [Scurato, Jesse](#); [Graybill, Eric](#)  
**Subject:** 48815 - Validated Electronic Data for Shiloh Church Road  
**Date:** Tuesday, May 19, 2020 12:53:00 PM  
**Attachments:** [48815 C0B76 LTR.pdf](#)  
[image001.png](#)  
[48815\\_C0B76\\_DVR.pdf](#)  
[48815\\_C0B76\\_SSR.pdf](#)  
[EQuIS 1\\_48815\\_C0B76\\_VAL.xls](#)  
[EQuIS 2\\_48815\\_C0B76\\_VAL.xls](#)  
[EQuIS 3\\_48815\\_C0B76\\_VAL.xls](#)  
[EQuIS\\_48815\\_C0B76\\_VAL.xls](#)

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Christine Wagner  
US EPA Region 3  
1650 Arch Street  
Philadelphia, PA 19103-2029

Dear Christine,

Attached to this message you will find electronic files containing the validation report and validated data for the Shiloh Church Road site, Case # 48815, SDG C0B76. The validation of this case was completed by the Region III Environmental Services Assistance Team (ESAT).

Please contact ESAT's RPO, Eric Graybill by phone at 410-305-2665 or e-mail at [Graybill.Eric@epa.gov](mailto:Graybill.Eric@epa.gov) if additional assistance is needed.

TO # 0002                      TDF # 0420037



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**Sharon Roberson** | Chemistry Data Manager | 410-305-3037 | [Roberson.Sharon@epa.gov](mailto:Roberson.Sharon@epa.gov)  
**ICF** | 701 Mapes Road, Fort Meade, MD 20755-5350



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION III  
Environmental Sciences Center  
701 Mapes Road  
Fort Meade, Maryland 20755-5350

DATE: 5/19/2020

SUBJECT: Region III Data QA Review

FROM: Eric Graybill  
Region III ESAT RPO (3LS20)

A handwritten signature in blue ink, which appears to read "Eric", followed by a stylized box and a vertical line.

TO: CHRIS WAGNER  
Hazardous Site Cleanup Division (HSCD)

Attached is the data validation report for the SHILOH CHURCH RD REMOVAL ACTION site for RAS# 48815; SDG# C0B76 completed by the Region III Environmental Services Assistance Team (ESAT) contractor, ICF International, under the direction of Region III LSASD.

If you have any questions regarding this review, please call Eric Graybill at (410)-305-2665.

Attachment

cc:

Non-responsive based on revised  
Non-responsive based on revised

TO: #0002 TDF: #0420037





ICF  
ESAT Region 3  
US Environmental Protection Agency Environmental Science Center  
701 Mapes Road Ft. Meade, MD 20755-5350  
Phone 410-305-3012

**Date:** May 18, 2020

**To:** ESAT Region 3 Project Officer

**From:** Non-responsive based on revised scope  
Validator  
  
Non-responsive based on revised scope  
Reviewer

**Subject:** Organic Data Validation (S4VEM)  
Shiloh Church Road  
48815, COB76

### **Overview**

This data package consisted of three (3) drinking water samples including a field duplicate pair analyzed for Aroclor analytes.

Analyses were performed by Chemtech Consulting Group (CHM) according to Contract Laboratory Program (CLP) Statement of Work (SOW) SOM02.4.

Data were validated according to the National Functional Guidelines for Organic Superfund Methods Data Review and applicable USEPA Region 3 modifications. Electronic validation was performed by the Electronic Data eXchange & Evaluation System (EXES). The validation report has been assigned the Superfund Data Validation Label S4VEM (Stage\_4\_Validation\_Electronic\_Manual).

The three samples in this SDG were identified as drinking water samples on the chain of custody. These samples were evaluated utilizing drinking water criteria by the reviewer. No analyte in these samples exceeded the National Primary Drinking Water Regulations (NPDWRs) Maximum Contaminant Levels (MCLs).

The following validation narrative is an evaluation of laboratory reported data based on the electronic data package available through the EXES Data Manager dated April 7, 2020.

### **Summary**

No data quality outliers were identified that would require rejection or estimation of sample results.

**Notes**

No positive results were detected for any target analytes in these samples. Contract Required Quantitation Limits (CRQL) were met for all samples.

Laboratory blanks were free of contamination.

Laboratory Control Samples (LCS) reported acceptable results.

No positive results were reported for field duplicate pair, samples C0B76/C0B77.

Due to insufficient sample volume, Matrix Spike/Matrix Spike Duplicate (MS/MSD) analyses were not performed as scheduled for Aroclor fraction. The Region was notified by the laboratory.

Sample calculation checks were performed for LCS. All calculated results had RPDs less than 5% of the reported results. No sample data were qualified.

Manual integrations were performed and identified by the laboratory. A subset of these was evaluated and were found to be accurate and consistent. No action was taken based on manual integrations.

Validation qualifiers are only applied by the validator to field samples. Qualifiers may be applied by EXES electronic validation to laboratory quality control samples.

**Glossary of Organic Data Qualifier Codes**

Validation Qualifiers	In order of descending precedence. Only one of these qualifiers may apply to any result.
R	The data are unusable. The sample results are rejected due to serious deficiencies in meeting QC criteria. The analyte may or may not be present in the sample.
UJ	The analyte was analyzed for, but was not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.
U	The analyte was analyzed for, but was not detected above the level of the reported sample quantitation limit
J	The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.
J+	The result is an estimated quantity, but the result may be biased high.
J-	The result is an estimated quantity, but the result may be biased low.
Additional Qualifiers	Additional qualifiers may be combined with other qualifiers.
N	The analyte has been "tentatively identified" or "presumptively" as present.
B	The result is presumed a blank contaminant. This qualifier is used for drinking water samples only.
C	The target Pesticide or Aroclor analyte identification has been confirmed by Gas Chromatography/Mass Spectrometry (GC/MS). This qualifier may be added to other qualifiers.
X	The target Pesticide or Aroclor analyte identification was not confirmed when GC/MS analysis was performed. This qualifier may be added to other qualifiers.

# Sample Summary Report

Project Name: SHILOH CHURCH ROAD SITE  
Project

GroupID: 48815/EPW14030/C0B76

Lab Name: Chemtech Consulting Group

Sample Number: ABLK09      Method: Aroclors      Matrix: Water      MA Number:

Sample Location:      pH: 6      Sample Date:      Sample Time:

% Moisture:      % Solids: 0

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Aroclor-1016	Target	1.0	U	ug/L	1.0	U	1.0	YES	NV
Aroclor-1221	Target	1.0	U	ug/L	1.0	U	1.0	YES	NV
Aroclor-1232	Target	1.0	U	ug/L	1.0	U	1.0	YES	NV
Aroclor-1242	Target	1.0	U	ug/L	1.0	U	1.0	YES	NV
Aroclor-1248	Target	1.0	U	ug/L	1.0	U	1.0	YES	NV
Aroclor-1254	Target	1.0	U	ug/L	1.0	U	1.0	YES	NV
Aroclor-1260	Target	1.0	U	ug/L	1.0	U	1.0	YES	NV
Aroclor-1262	Target	1.0	U	ug/L	1.0	U	1.0	YES	NV
Aroclor-1268	Target	1.0	U	ug/L	1.0	U	1.0	YES	NV

# Sample Summary Report

Project Name: SHILOH CHURCH ROAD SITE Project	GroupID: 48815/EPW14030/C0B76	Lab Name: Chemtech Consulting Group
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Sample Number: ALCS09	Method: Aroclors	Matrix: Water	MA Number:
Sample Location:	pH: 6	Sample Date:	Sample Time:
% Moisture:		% Solids: 0	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Aroclor-1016	Spike	0.90	JP	ug/L	0.90	JP	1.0	YES	NV
Aroclor-1221	Target	1.0	U	ug/L	1.0	U	1.0	YES	NV
Aroclor-1232	Target	1.0	U	ug/L	1.0	U	1.0	YES	NV
Aroclor-1242	Target	1.0	U	ug/L	1.0	U	1.0	YES	NV
Aroclor-1248	Target	1.0	U	ug/L	1.0	U	1.0	YES	NV
Aroclor-1254	Target	1.0	U	ug/L	1.0	U	1.0	YES	NV
Aroclor-1260	Spike	0.92	JP	ug/L	0.92	JP	1.0	YES	NV
Aroclor-1262	Target	1.0	U	ug/L	1.0	U	1.0	YES	NV
Aroclor-1268	Target	1.0	U	ug/L	1.0	U	1.0	YES	NV

# Sample Summary Report

Project Name: SHILOH CHURCH ROAD SITE  
Project

GroupID: 48815/EPW14030/C0B76

Lab Name: Chemtech Consulting Group

Sample Number: C0B76

Method: Aroclors

Matrix: Water

MA Number:

Sample Location: RW-24

pH: 6

Sample Date: 03/18/2020

Sample Time: 10:45:00

% Moisture:

% Solids: 0

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Aroclor-1016	Target	1.0	U	ug/L	1.0	U	1.0	YES	S4VEM
Aroclor-1221	Target	1.0	U	ug/L	1.0	U	1.0	YES	S4VEM
Aroclor-1232	Target	1.0	U	ug/L	1.0	U	1.0	YES	S4VEM
Aroclor-1242	Target	1.0	U	ug/L	1.0	U	1.0	YES	S4VEM
Aroclor-1248	Target	1.0	U	ug/L	1.0	U	1.0	YES	S4VEM
Aroclor-1254	Target	1.0	U	ug/L	1.0	U	1.0	YES	S4VEM
Aroclor-1260	Target	1.0	U	ug/L	1.0	U	1.0	YES	S4VEM
Aroclor-1262	Target	1.0	U	ug/L	1.0	U	1.0	YES	S4VEM
Aroclor-1268	Target	1.0	U	ug/L	1.0	U	1.0	YES	S4VEM



# Sample Summary Report

Project Name: SHILOH CHURCH ROAD SITE  
Project

GroupID: 48815/EPW14030/C0B76

Lab Name: Chemtech Consulting Group

Sample Number: C0B77

Method: Aroclors

Matrix: Water

MA Number:

Sample Location: RW-24

pH: 6

Sample Date: 03/18/2020

Sample Time: 10:50:00

% Moisture:

% Solids: 0

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Aroclor-1016	Target	1.0	U	ug/L	1.0	U	1.0	YES	S4VEM
Aroclor-1221	Target	1.0	U	ug/L	1.0	U	1.0	YES	S4VEM
Aroclor-1232	Target	1.0	U	ug/L	1.0	U	1.0	YES	S4VEM
Aroclor-1242	Target	1.0	U	ug/L	1.0	U	1.0	YES	S4VEM
Aroclor-1248	Target	1.0	U	ug/L	1.0	U	1.0	YES	S4VEM
Aroclor-1254	Target	1.0	U	ug/L	1.0	U	1.0	YES	S4VEM
Aroclor-1260	Target	1.0	U	ug/L	1.0	U	1.0	YES	S4VEM
Aroclor-1262	Target	1.0	U	ug/L	1.0	U	1.0	YES	S4VEM
Aroclor-1268	Target	1.0	U	ug/L	1.0	U	1.0	YES	S4VEM

# Sample Summary Report

Project Name: SHILOH CHURCH ROAD SITE  
Project

GroupID: 48815/EPW14030/C0B76

Lab Name: Chemtech Consulting Group

Sample Number: C0B78

Method: Aroclors

Matrix: Water

MA Number:

Sample Location: RW-25

pH: 6

Sample Date: 03/18/2020

Sample Time: 11:10:00

% Moisture:

% Solids: 0

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Aroclor-1016	Target	1.0	U	ug/L	1.0	U	1.0	YES	S4VEM
Aroclor-1221	Target	1.0	U	ug/L	1.0	U	1.0	YES	S4VEM
Aroclor-1232	Target	1.0	U	ug/L	1.0	U	1.0	YES	S4VEM
Aroclor-1242	Target	1.0	U	ug/L	1.0	U	1.0	YES	S4VEM
Aroclor-1248	Target	1.0	U	ug/L	1.0	U	1.0	YES	S4VEM
Aroclor-1254	Target	1.0	U	ug/L	1.0	U	1.0	YES	S4VEM
Aroclor-1260	Target	1.0	U	ug/L	1.0	U	1.0	YES	S4VEM
Aroclor-1262	Target	1.0	U	ug/L	1.0	U	1.0	YES	S4VEM
Aroclor-1268	Target	1.0	U	ug/L	1.0	U	1.0	YES	S4VEM

# Sample Summary Report

Project Name: SHILOH CHURCH ROAD SITE  
Project

GroupID: 48815/EPW14030/C0B76

Lab Name: Chemtech Consulting Group

**ESAT DATA VALIDATION EVALUATION CHECKLIST**  
Contract # EP-W-13-023

TDF #: 0420037	Revision: 0	Case #: 48815	SDG: C0B76
Site Name: Shiloh Church Road			
Parameter(s): Aroclor			
Method(s): SOM02.4			
Laboratory: CHM			
Reviewer: <span style="background-color: black; color: red;">Non-responsive based on revised scope</span>		Date Submitted to EPA: 5/19/2020	
EPA RPM/OSC: Chris Wagner		Number of hours spent on review: 4	
cc: <span style="background-color: black; color: red;">Non-responsive based on revised scope</span> (Weston Solutions)		Number of Samples/Aliquots: 3/3	
Validation Level/Stage: M3/S4VEM		EDD: YES	

<u>CRITERIA</u>	<u>YES</u>	<u>NO</u>	<u>COMMENTS</u>
Format according to Region III protocol	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Clarity of report	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Qualifiers applied correctly	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Consistency between narrative and data summary form(s)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Error-free transcription	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

**EFFICIENCY OF CONTRACTOR**

Approval recommended for current submission	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Time spent on review is reasonable	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

Technical Evaluation	3.6	<span style="background-color: black; color: red;">Non-responsive based on revised scope</span>
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<u>ESD OVERSIGHT DATES</u>	<u>TPO</u>	<u>Oversight</u>	<u>ESAT</u>
Received at EPA	5/19/2020		
Oversight assigned	5/19/2020		
Oversight received		5/19/2020	
Oversight completed		5/19/2020	
Feedback given	5/19/2020		
Mailed to RPM			

## Data Validation Checklist - Organics

TDF #: 0420037	Case/DAS #: 48815
Site Name: Shiloh Church Road	SDG #: C0B76
Program: <input checked="" type="checkbox"/> CLP <input type="checkbox"/> Tier IV <input type="checkbox"/> Other	DV Type: <input checked="" type="checkbox"/> Org <input type="checkbox"/> Ino <input type="checkbox"/> HiRes <input type="checkbox"/> Rad <input type="checkbox"/> Asb
Parameter: Aroclor	DV Regional Level: M3
SOW/Method: SOM02.4	DV Stage: S4VEM
Laboratory Code: CHM	Reviewer: <span style="background-color: black; color: red; font-size: small;">Non-responsive based on rev</span>

Due Date: 5/4/20

### General

CRITERIA	CHECK	COMMENTS
<b>EPA Oversight Checklist</b>		
TDF #	<input checked="" type="checkbox"/>	
Case #	<input checked="" type="checkbox"/>	
SDG #	<input checked="" type="checkbox"/>	
Site Name	<input checked="" type="checkbox"/>	
Laboratory	<input checked="" type="checkbox"/>	
EPA OSC/RPM	<input checked="" type="checkbox"/>	
CC: (Contractors)	<input checked="" type="checkbox"/>	
Validation Level/Stage	<input checked="" type="checkbox"/>	
Parameter	<input checked="" type="checkbox"/>	
Number of Samples/Aliquots	<input checked="" type="checkbox"/>	
<b>Narrative</b>		Font size/bold – fixed
Report Header	<input checked="" type="checkbox"/>	
Report Footer	<input checked="" type="checkbox"/>	
<b>Overview</b>		
Laboratory	<input checked="" type="checkbox"/>	
Analytical method	<input checked="" type="checkbox"/>	
Analytical services program	<input checked="" type="checkbox"/>	
NFG reference	<input checked="" type="checkbox"/>	
Validation level	<input checked="" type="checkbox"/>	
Data package receipt date	<input checked="" type="checkbox"/>	
<b>Criteria</b>		
Qualifier list	<input checked="" type="checkbox"/>	
<b>Appendix A</b>		
Regional COC/ARF	<input checked="" type="checkbox"/>	
<b>Appendix B</b>		
Laboratory narrative/Excerpts	<input checked="" type="checkbox"/>	
<b>Appendix C</b>		
EXES report/Supplemental	<input checked="" type="checkbox"/>	

General Comments:

Reviewed By: Non-responsive based on revised scope Date: 5/8/20

## Data Validation Checklist - Organics

TDF #: 0420037	Case/DAS #: 48815
Site Name: Shiloh Church Road	SDG #: C0B76
Program: <input checked="" type="checkbox"/> CLP <input type="checkbox"/> Tier IV <input type="checkbox"/> Other	DV Type: <input checked="" type="checkbox"/> Org <input type="checkbox"/> Ino <input type="checkbox"/> HiRes <input type="checkbox"/> Rad <input type="checkbox"/> Asb
Parameter: Aroclor	DV Regional Level: M3
SOW/Method: SOM02.4	DV Stage: S4VEM
Laboratory Code: CHM	Reviewer: <span style="background-color: black; color: red; font-size: small;">Non-responsive based on revised scope</span>

### Technical

Section	Check	Comments	
<b>Overview</b>	<input checked="" type="checkbox"/>		
Matrix and # of samples	<input checked="" type="checkbox"/>		
Field QC samples	<input checked="" type="checkbox"/>		
<b>Summary</b>	<input checked="" type="checkbox"/>		
<b>Major problems</b>	<input checked="" type="checkbox"/>		
<b>Minor problems</b>	<input checked="" type="checkbox"/>		
<b>Notes</b>	<input checked="" type="checkbox"/>		
Compounds below CRQL	<input checked="" type="checkbox"/>		
Blank contaminants	<input checked="" type="checkbox"/>		
Field Duplicates	<input checked="" type="checkbox"/>		
Field/Trip Blanks	<input checked="" type="checkbox"/>		
Dilutions	<input checked="" type="checkbox"/>		
Carryover	<input checked="" type="checkbox"/>		
Manual integration	<input checked="" type="checkbox"/>		
TICs	<input checked="" type="checkbox"/>		
Calculation	<input checked="" type="checkbox"/>		
<b>SSRs/Form Is</b>	<input checked="" type="checkbox"/>		
Non-Detect RLs	<input checked="" type="checkbox"/>		
<b>EDD</b>	<input checked="" type="checkbox"/>		
DV Item	Check	Qualifier Applied	Comments
Preservation/Holding Time	<input checked="" type="checkbox"/>		
Instrument Performance Check	<input checked="" type="checkbox"/>		
Initial Calibration	<input checked="" type="checkbox"/>		
Continuing Calibration	<input checked="" type="checkbox"/>		
Blanks	<input checked="" type="checkbox"/>		
DMCs/Surrogates	<input checked="" type="checkbox"/>		
MS/MSDs	<input checked="" type="checkbox"/>		
LCS/LCSDs	<input checked="" type="checkbox"/>		
Internal Standards	<input checked="" type="checkbox"/>		
Other:	<input type="checkbox"/>		

General Comments:

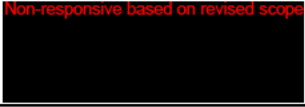
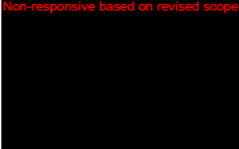
Reviewed By: Non-responsive based on revised scope \_\_\_\_\_ Date: 5/18/20

## SDG COVER PAGE

Lab Name: Chemtech Consulting Group Contract: EPW14030  
 Lab Code: CHM Case No.: 48815 MA No. :                      SDG No.: C0B76  
 SOW No. : SOM02.4

EPA Sample No.	Lab Sample ID	Trace VOA	Low Med VOA	Analysis Method			
				SVOA	SVOA SIM	PEST	ARO
<u>C0B76</u>	<u>L1984-01</u>	<u>                    </u>	<u>                    </u>	<u>                    </u>	<u>                    </u>	<u>                    </u>	<u>X</u>
<u>C0B77</u>	<u>L1984-02</u>	<u>                    </u>	<u>                    </u>	<u>                    </u>	<u>                    </u>	<u>                    </u>	<u>X</u>
<u>C0B78</u>	<u>L1984-03</u>	<u>                    </u>	<u>                    </u>	<u>                    </u>	<u>                    </u>	<u>                    </u>	<u>X</u>

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed in the SDG Narrative. Release of the data contained in this hardcopy data package and in the electronic data submitted has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature:  Name:   
 Date: 04/07/2020 Title: 

**SDG NARRATIVE****LAB NAME: CHEMTECH CONSULTING GROUP****CASE: 48815****SDG: C0B76****CONTRACT: EPW14030****LAB CODE: CHM****CHEMTECH PROJECT: L1984****MODIFICATION REF. NUMBER: NA**

Sample ID	EPA Sample ID	pH
L1984-01	C0B76	
L1984-02	C0B77	
L1984-03	C0B78	

3 Water samples were delivered to the laboratory intact on 03/19/2020.

Test requested on the Chain of Custody was Aroclor by Method SOM02.4.

The temperature of the samples was measured using an I R Gun. The samples temperature was 2.3 degree Celsius for the samples received on 03/19/2020.

**Discrepancies with tags, jars, and/or COC**

**Issue 1:** ARO samples under this Case are scheduled for a 21 day TAT; however, the COC the laboratory received for this Case lists a 14 day TAT. The laboratory would like to confirm that they may proceed as scheduled.

**Resolution 1:** In accordance with previous direction from Region 3, the laboratory will note the issue in the SDG Narrative and proceed with the analysis of the samples as indicated on the Scheduling Notification Form. The resolution will be applied to all COCs received for this Case that list information that does not match the Scheduling Notification Form.

**Laboratory problems**

**Issue 2:** The laboratory has received three water ARO samples and is scheduled for seven water ARO samples under this Case, and would like to confirm if this Case is complete per the COC. The shipping end date for the Case is 3/20/2020.

**Resolution 2:** Per Region 3, no additional samples will ship as the Case is now complete. Please note the issue in the SDG Narrative and proceed with the analysis of the samples.

**Insufficient/inappropriate designation of laboratory QC**

**Issue 3:** Laboratory QC is scheduled for ARO analysis; however, no sample has been designated for QC and extra volume was not received. The laboratory would like to confirm if they may proceed without laboratory QC for the received ARO samples.



**Resolution 3:** Per Region 3, the laboratory with proceed with the analysis of the received samples without performing laboratory QC. Please note the issue in the SDG Narrative and proceed with the analysis of the samples.

### **Aroclors:**

The analyses were performed on instrument GCECD\_R. The front column is ZB-MR1 which is 30 meters, 0.32 mm ID, 0.5 um df, Catalogue # 7HM-G016-17. The rear column is ZB-MR2 which is 30 meters, 0.32 mm ID, 0.25 µm; Catalogue # 7HM-G017-11.

Samples were analyzed on a single injection dual column system. To distinguish the second column analysis from the first column a -2 suffix was added to the file id on the form 8 and form 1. These referrers to forms were both columns are reported. Form 1s for the IBLK and ALCS have the -2 on the form as per the method section 3.3.7.1 foot notes.

Aroclor samples were extracted by Method SOM02.4 on 03/20/2020 and analyzed on 03/23/2020. All the samples were subjected to a Sulfuric acid cleanup. The samples were extracted and analyzed within contractual holding time.

The Surrogate recoveries met the acceptable criteria.  
The Retention Times were acceptable for all samples.  
The Laboratory Control Sample met requirements.  
The Blank analysis did not indicate the presence of lab contamination.  
The Initial Calibration met the requirements.  
The Continuing Calibrations met the requirements.

See **Manual Integration report** for the manual integration information at the end of the case narrative.

### **Calculation for Concentration in Water Samples:**

$$\text{Concentration ug/L} = \frac{(Ax) (Vt) (DF) (GPC)}{(CF) (Vo) (Vi)}$$

Where,

Ax = Response (peak area or height) of the compound to be measured.  
CF = Mean Calibration Factor from the initial calibration (area/ng).

Vo = Volume of water extracted in mL.

Vi = Volume of extract injected in uL.

Vt = Volume of the concentrated extract in uL

GPC =  $\frac{V_{in}}{V_{out}}$  = GPC factor (If no GPC is performed, GPC=1)

Vin = Volume of extract loaded onto GPC column.

Vout = Volume of extract collected after GPC cleanup.

DF = Dilution Factor.

**Example of AR1260 calculation for Peak 1**

Calibration factor Peak 1 100ppb ISTD= $\frac{\text{peak area}}{\text{Mass injected ng}}$   
Column1

$$= \frac{8314245}{0.100}$$

= 83142450 calibration factor for Peak 1 100ppb

Average of 5 peaks = 73189791

No target **Aroclors** were detected in the samples.

I certify that the data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. The laboratory manager or his designee, as verified by the following signature has authorized release of the data contained in this hard copy data package.

Signature  Name: 

Date: 04/07/2020 Title: Document Control Officer



284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

## Manual Integration Report

Sequence:	PR031220	Instrument	ECD_r
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Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
AR1232ICC100/ AR1232101	PR044914.D	AR-1232-4	Not responsive based on	3/16/2020 4:47:26 PM	Not responsive based on	3/16/2020 4:48:04	Peak Integrated by Software incorrectly
AR1232ICC100/ AR1232101	PR044914.D	AR-1232-5		3/16/2020 4:47:26 PM		3/16/2020 4:48:04	Peak Integrated by Software incorrectly
AR1242ICC100/ AR1242101	PR044919.D	AR-1242-5 #2		3/16/2020 4:47:33 PM		3/16/2020 4:48:05	Peak Integrated by Software incorrectly
AR1242ICC200/ AR1242201	PR044920.D	AR-1242-5 #2		3/16/2020 4:47:38 PM		3/16/2020 4:48:05	Peak Integrated by Software incorrectly
AR1248ICC100/ AR1248101	PR044924.D	AR-1248-5 #2		3/16/2020 4:47:43 PM		3/16/2020 4:48:06	Peak Integrated by Software incorrectly
AR1248ICC200/ AR1248201	PR044925.D	AR-1248-5 #2		3/16/2020 4:47:48 PM		3/16/2020 4:48:07	Peak Integrated by Software incorrectly
AR1254ICC100/ AR1254101	PR044929.D	AR-1254-1 #2		3/16/2020 4:47:58 PM		3/16/2020 4:48:17	Peak Integrated by Software incorrectly
AR1254ICC100/ AR1254101	PR044929.D	AR-1254-2 #2		3/16/2020 4:47:58 PM		3/16/2020 4:48:17	Peak Integrated by Software incorrectly
AR1262ICC200/ AR1262201	PR044935.D	AR-1262-2 #2		3/16/2020 4:48:11 PM		3/16/2020 4:48:20	Peak Integrated by Software incorrectly
AR1262ICC200/ AR1262201	PR044935.D	AR-1262-3 #2		3/16/2020 4:48:11 PM		3/16/2020 4:48:20	Peak Integrated by Software incorrectly
AR1262ICC200/ AR1262201	PR044935.D	AR-1262-4 #2		3/16/2020 4:48:11 PM		3/16/2020 4:48:20	Peak Integrated by Software incorrectly



## Manual Integration Report

Sequence:	PR032320	Instrument	ECD_r
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Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
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**Data Validation Report**  
**Data Review Results**

Project Name: SHILOH CHURCH ROAD SITE Project	GroupID: 48815/EPW14030/C0B76	Lab Name: Chemtech Consulting Group
Submission Group Id: 31780335	Organization: EPA Region 3	SOW: SOM02.4

**HoldingTimes\_Preservation**

**NONE FOUND**

# Data Validation Report

Page 2

## Data Review Results

Wed, 8  
Apr  
2020  
09:32:57

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Project Name: SHILOH CHURCH ROAD SITE Project

GroupID: 48815/EPW14030/C0B76

Lab Name: Chemtech Consulting Group

Submission Group Id: 31780335

Organization: EPA Region 3

SOW: SOM02.4

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### InitialCalibration

---

NONE FOUND

# Data Validation Report

Page 3

## Data Review Results

Wed, 8  
Apr  
2020  
09:32:57

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Project Name: SHILOH CHURCH ROAD SITE Project

GroupID: 48815/EPW14030/C0B76

Lab Name: Chemtech Consulting Group

Submission Group Id: 31780335

Organization: EPA Region 3

SOW: SOM02.4

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ContinuingCalibrationVerification

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NONE FOUND

# Data Validation Report

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## Data Review Results

Wed, 8  
Apr  
2020  
09:32:57

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Project Name: SHILOH CHURCH ROAD SITE Project

GroupID: 48815/EPW14030/C0B76

Lab Name: Chemtech Consulting Group

Submission Group Id: 31780335

Organization: EPA Region 3

SOW: SOM02.4

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### Blanks

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**NONE FOUND**



# Data Validation Report

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## Data Review Results

Wed, 8  
Apr  
2020  
09:32:57

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Project Name: SHILOH CHURCH ROAD SITE Project

GroupID: 48815/EPW14030/C0B76

Lab Name: Chemtech Consulting Group

Submission Group Id: 31780335

Organization: EPA Region 3

SOW: SOM02.4

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**DMC\_Surrogate**

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**NONE FOUND**

# Data Validation Report

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## Data Review Results

Wed, 8  
Apr  
2020  
09:32:57

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Project Name: SHILOH CHURCH ROAD SITE Project

GroupID: 48815/EPW14030/C0B76

Lab Name: Chemtech Consulting Group

Submission Group Id: 31780335

Organization: EPA Region 3

SOW: SOM02.4

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### MatrixSpikes

---

**NONE FOUND**

# Data Validation Report

Page 7

## Data Review Results

Wed, 8  
Apr  
2020  
09:32:57

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Project Name: SHILOH CHURCH ROAD SITE Project

GroupID: 48815/EPW14030/C0B76

Lab Name: Chemtech Consulting Group

Submission Group Id: 31780335

Organization: EPA Region 3

SOW: SOM02.4

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LaboratoryControlSample

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NONE FOUND

# Data Validation Report

Page 8

## Data Review Results

Wed, 8  
Apr  
2020  
09:32:57

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Project Name: SHILOH CHURCH ROAD SITE Project

GroupID: 48815/EPW14030/C0B76

Lab Name: Chemtech Consulting Group

Submission Group Id: 31780335

Organization: EPA Region 3

SOW: SOM02.4

---

### Cleanup

---

**NONE FOUND**

## Data Review Results

Wed, 8  
Apr  
2020  
09:32:57

Project Name: SHILOH CHURCH ROAD SITE Project

GroupID: 48815/EPW14030/C0B76

Lab Name: Chemtech Consulting Group

Submission Group Id: 31780335

Organization: EPA Region 3

SOW: SOM02.4

## TargetAnalyteQuantitation

Method - Aroclors

Test Name: EXES-1509

Defect Message: The following samples have result difference between the two columns greater than 25%. Detects are not qualified. Use professional judgment to qualify data.

Associated Samples: ALCS09

Defective Analyte	Defective Samples/Analyses
Aroclor-1016	ALCS09
Aroclor-1260	ALCS09

Test Name: EXES-790

Defect Message: The following samples have analyte results greater than or equal to detection limit (MDL) and below quantitation limit (CRQL). Detects are qualified as estimated J.

Associated Samples: ALCS09

Defective Analyte	Defective Samples/Analyses
Aroclor-1016	ALCS09
Aroclor-1260	ALCS09

# Data Validation Report

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## Data Review Results

Wed, 8  
Apr  
2020  
09:32:57

---

Project Name: SHILOH CHURCH ROAD SITE Project

GroupID: 48815/EPW14030/C0B76

Lab Name: Chemtech Consulting Group

Submission Group Id: 31780335

Organization: EPA Region 3

SOW: SOM02.4

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### PercentSolids

---

NONE FOUND

# Data Validation Report

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## Data Review Results

Wed, 8  
Apr  
2020  
09:32:57

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Project Name: SHILOH CHURCH ROAD SITE Project

GroupID: 48815/EPW14030/C0B76

Lab Name: Chemtech Consulting Group

Submission Group Id: 31780335

Organization: EPA Region 3

SOW: SOM02.4

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### SampleAnalysis

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**NONE FOUND**